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# PACIFIC ISLANDS HERPETOLOGY, NO. V GUADALCANAL, SOLOMON ISLANDS: A CHECK LIST OF SPECIES (1)

VASCO M. TANNER
Professor of Zoology and Entomology
Brigham Young University
Provo. Utah

#### INTRODUCTION

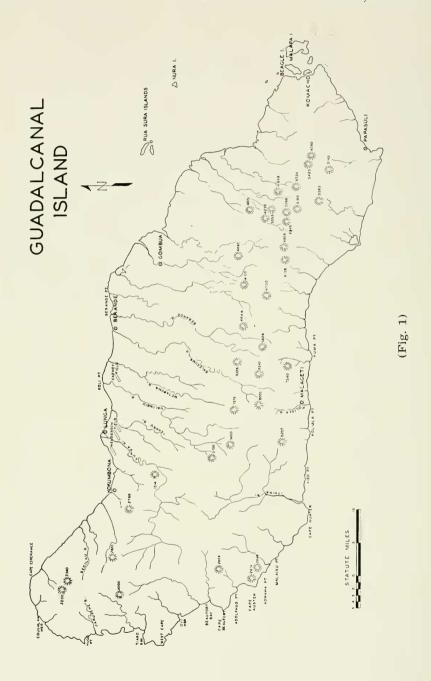
This paper, the fifth in the series, deals with the amphibians and reptiles, collected by United States Military personnel while they were stationed on several of the Solomon Islands.

These islands, which were under the British Protectorate at the out-break of the Japanese War in 1941, extend for about 800 miles in a southeast direction from the Bismarck Archipelago. They lie south of the equator, between 5° 24′ and 10° 10′ south longitude and 154° 38′ and 161° 20′ east longitude, which is well within the tropical zone.

In this study, eleven large islands are considered as composing the Solomon Archipelago, which form two chains. The northern row of islands consists of Buka and Bougainville, just south of New Britain. Next is Choiseul, followed by Isabel and Malaita. The southern group, which practically parallels the northern row, consists of Vella Lavella, Kolombangara, New Georgia, Russell, Guadalcanal and San Cristobal.

Bougainville is the largest island of the group. It has a surface area of 3,900 square miles, the highest mountain peak, Mount Bally, 10,000 feet and also active-volcanoes. Guadalcanal, 2.500 square miles, is the largest island in the southern row with a peak over 8,000 feet high (see map fig. 1).

<sup>(1)</sup> Contribution No. 127 from the Department of Zoology and Entomology, Brigham Young University.



The climate is tropical, the average temperature being about 82°. During the rainy season, from January to March, it is very hot and humid. The rainfall along the coast is about 120 inches annually. The weather from April to November is fairly cool.

The native population is between ninety and one hundred thousand Melanesian people. They cultivate yams, taros, and coconuts for food and trade. The larger islands are covered with imprenetrable jungles. The native pig is one of two native land mammals on the islands. One hundred twenty-seven land birds have been reported from this archipelago and no doubt a number of additional species will be discovered when the interior of the islands is carefully explored.

Many species of interesting insects are found on the Solomon Islands. Several of the service men who collected reptiles also made insect collections. One of the largest general collections was made by Captain Beck. He was stationed on the Tenaru River for a year. During this time he also made some studies of the island vegetation and topography. The following is a statement of his impressions of this part of Guadalcanal.

"Today I made my first trip to the foothills. To the area where I went there was an abrupt climb from the fairly level coastal plain to the contrasting region of grassland and forest. In this particular part of the foothills are large grass patches surrounded by the jungle forest. The grass and forest areas both have the same elevation, angle of exposure of the sun, drainage and soil conditions, yet the two types of vegetation are sharply separated. I discovered that when one tries to stay out in the open grass areas, when the sun is beating down, the heat is almost beyond human endurance. On several occasions I tried to remain out in the grass collecting insects but the heat was so oppressive I became dizzy and for several minutes after retiring to the jungle I had a severe head-ache.

"This intense heat on a clear day may account for the absence of bird life in the grasslands. With the exception of an occasional swallow flying above the grass one does not see a bird. The mammal life so common to grasslands, in the States, is nonexistant in the grass areas on this island. One does not escape the heat by dropping into the grass, which is four to five feet high. The heat seems to be more suffocating. In contrast I found in the forest jungle that there is a combination of shade and openness to allow for air movement.

"It is possible, with reference to birds, that the lack of fruits may

in part account for the absence of birds in the grasslands, but I really believe it is a heat factor. The forest jungle has quite an array of bird life, large or small, loud or quiet, colorful or drab. I was impressed by the variety of songs."

Mr. Robert C. Pendleton who spent twenty-two months in the Solomon Islands and has published his findings, 1949, gives a clear picture of the plant formations of Guadalcanal. The following ex-

cerpts are from his study.

"Guadalcanal is well within the true tropic belt and the work of many plant geographers indicates that a rain forest type of vegetation should be expected. However, this island differs in having the major portion of the north coast covered with coarse grass while a true rain forest vegetation occurs only in the south portion and on the mountains.

"The main mountain ranges on the island are approximately parallel and occupy a central position. They average about 6,000 feet in elevation in the central portion of the island and Mt. Popomanasiu reaches a maximum height of 8.005 feet. Their position across the prevailing trade winds is the factor considered responsible for the grassland formation on the north coast and on the west tip of the Florida group beyond.

"Comprehensive ground studies were made only on the north coastal plain, because travel to other portions was extremely difficult and the press of military duties prohibited any long trips. It was possible to study the vegetation from the Belasuna River to Cape Esperance and to penetrate the hinterland along the Malimbu, Poha, and Tenaru Rivers to a depth of 8 to 12 miles. Air trips were arranged through the courtesy of the pilots of the 13th Air Force. On these flights the entire island was covered and a far better idea of the physiognomy and extent of plant cover types was obtained.

"From the air the contrast in plant cover on Guadalcanal as compared with that on other Solomon Islands is striking. A flight along the north coast of the island from east to west reveals that the eastern third of the plain is densely covered with rain forest but the western two-thirds is covered predominately by grass. The rivers, running through the grassland support strips of forest, which connect the forests of the mountains with the narrow strand forest which forms a green border on the coast.

"Guadalcanal is one of the southern islands of the Solomon Group and is characterized by having a rain forest on the south side and grasslands on the north side. It is the only island of the group having a mountain chain at right angles to the prevailing wind direction.

"The ecological factors responsible for the grasslands of Guadalcanal are both climatic and topographic. In the rain shadow insufficient rain falls during several months to support a forest. The grassland is not due to fires or soil deficiencies."

#### THE HERPETOLOGICAL FAUNA

To what extent the herpetological fauna of the grasslands and rain forests of Guadalcanal differ has apparently not been determined. In this report all the species studied were collected on the north side of the island. Likewise, so far as I have been able to determine, previous collections were in the main made on the north side of Guadalcanal. An ecological study of the species confined entirely to the grassland, as well as those found in the interior of the island on the higher mountains should be of value. The irregular and frequently reduced rainfall on the grasslands along with the intense heat possibly deters the movement of rain forest species over large areas of the island.

An equally interesting problem is that of tracing the origin of the reptile fauna of the Solomons. While studying the thirty-five species of this report, a check list of the amphibians and reptiles of the Solomon Islands was prepared and is included here. A comparison of the Solomon Islands list with the New Guinea one, Loveridge, 1948, reveals that, even though there are a number of endemic species in the Solomon Islands, the general facies of the fauna is New Guinean. This suggests that the Solomon Islands were, no doubt, in the distant past connected with New Guinea, as New Guinea was likewise once connected with Australia. After the Solomon Islands land mass was separated from New Guinea evidence supports the belief that the present two chains of islands developed which has contributed to the endenism of the several Islands. It has recently been pointed out by Brown and Myers, 1949, that "the Solomons display an important endemic frog fauna, including at least three endemic ranid genera." This is as it should be, if the above point of view is correct, that these continental islands were once a part of New Guinea, which now has four times as many endemic frogs as the Solomons.

One should not conclude from the above that the Solomon fauna

is entirely New Guinea-Australian in origin. Aside from the New Guinea-Australian affinities are found such genera as *Gymnodactylus*, *Gekko*, *Pseudogekko*, *Typhlops*, and *Hydrophis* which are represented by many species in the northern Islands.

There are still many unsolved problems relevant to the distribution of the herpetological fauna of the South Pacific Islands. Each year, however, progress is being made in wearing down the obsticles which stand in the way to a clear understanding of the origin and distribution of the amphibians and reptiles.

#### ACKNOWLEDGMENTS

Without the painstaking efforts of Captain D E. Beck, Ernest Reimschiissel, Doyle Taylor, R. C. Pendleton, J. Chattin, H. Hawkins. L. Adams, and other servicemen the materials upon which this report is based would not have been collected. To them I express my thanks. Dr. W. C. Brown has been very cooperative in loaning the writer rare literature and checking the determination of some species. Dr. Doris Cochran, Curator of Herpetology at U. S. National Museum kindly loaned the writer many Solomon Island species. Dr. Karl P. Schmidt loaned the writer some literature and checked the determination of two specimens. Prof. Charles Wharton of Emory University, Georgia, kindly submitted some interesting species to me for study. Dr. J. R. Heath of San Jose Teachers College, Dr. Geo. Myers of Stanford University, and Dr. R. Stebbins of the University of California, at Berkeley, loaned the writer a number of Solomon Islands specimens.

To all who have assisted, in any way, as mentioned above, I express my thanks and appreciation.

#### **AMPHIBIANS**

# Family Bufonidae

#### BUFO MARINUS (Linnaeus)

Linnaeus, Systema Naturae, 10th Ed., Vol 1, p. 211, 1759 (Rana)

BYU 6960, 6969, 7015-17 Guadalcanal, (D E. Beck) May, 1944
BYU 11020 (48-A) (49-A) Gavutu Isl. (R. C. Pendleton) May 8, 1945
No. 3-A-6A Guadalcanal, (R. C. Pendleton) Dec. 22, 1943
No. 20-A Guadalcanal, (R. C. Pendleton) May 12, 1944
No. 24-A - 36A-39A Banik Is., (R. C. Pendleton) Sept. 21, 1944
Russell Isls.

The specimens of *marinus* from the Solomon Islands are represented by three adult males (BYU 11020, 48A, and 49A), females

(BYU 6960, 4-A, and 20-A), and several juveniles. The females are similar to adults of the same sex, which I have examined, from Saipan Island of the Mariana Islands and Carmen, Nuevo Leon, Mexico. The males, the first adults I have seen, differ considerably from the females in their vestiture. They have numerous spines over the back and legs in contrast to the few found in the females. The large tuberclers or warts of the females have usually one spine and very few in between, while the male warts have a cluster of spines and many small ones scattered between these warts.

Dr. Beck made the following observations on the color of a live female: "The dorsal ground color is greyish green. The large glands are tawny with reddish tint. Laterally the body is yellow with a tinge of green, which color extends anteriorly along the upper mandibles. The belly is white and grey streaked. The eyes have a black iris and a silver to pale yellow cornea. The tympanium is grey."

Mr. Pendleton collected this toad in the pools and ditches of the cocus groves.

This introduced species is apparently wide spread in the South Pacific Islands where it is used as a help in controlling insects.

# Family Hylidae

#### HYLA THESAURENSIS Peters

Peters, Monatsh. Akad. Wiss. Berlin, p. 421, 1877.

BYU 6972, 7019, 7266	Guadalcanal (D E. Beck), May, August, 1944
BYU 7048-52, 7160	Guadalcanal (D E. Beck), July, August, 1944
BYU 7452-65, 7750-63	Guadalcanal (D E. Beck), March, 1945
BYU 7139-42, 7868	Guadalcanal (D E. Beck), June, 1944
BYU 7066, 7104-5	Guadalcanal (E. Reimschiissel), July, Aug., 1944
No. 28-A	Mono Island (R. C. Pendleton), Nov. 26, 1944
No. 1-A, 2A	Guadalcanal (R. C. Pendleton) Dec. 20, 1943
No. 7-15-A	Guadalcanal (R. C. Pendleton), March, April,
	1944

Many tadpoles taken by Beck and Reimschiissel.

A study of the fifty-four specimens listed above are found to vary considerably in color and general morphology. Some of the preserved adults, as well as juveniles, have white markings along the median dorsal and lateral parts of the body and head, others are fairly uniform in grey color while some are grey with dark blotches. The one specimen from Mono Island shows the dark blotches on a grey background. It also has a longer more pointed head than the Guadalcanal specimens and the web does not extend up the fourth toes as far as in the Guadalcanal specimens.

Captain Beck reports that some individuals of this tree frog, when alive, are colored as follows: "The large red bronzed eyes with dark pupil contrasts vividly with the yellow-green pattern on the dark velvet brown of the dorsum. The yellow pattern is almost an iridescent tone in certain light reflections. In some specimens there are yellow-green lateral and medial stripes and two dots of this color between the eyes. There is also a yellow strip at the anal region and one on each side of the head with a tiny dot at the extreme anterior part. Ventrally, the rear legs, the anal regions, forelegs, pectoral girdle, and edge of the mouth is a pale blue-green color. The rest of the body is white."

Some of the largest specimens are 47 mm. in body length with oblique vomerine teeth placed between the choanae; tympanum three-quarters the eye diameter; and with outer finger one-third webbed.

Both Captain Beck and Mr. Pendleton report this species as common on leaves of the forest floor plants. Specimen no. 28-A was taken on the leaf of Plantain; altitude 300 feet.

Barbour (1921), Burt (1932), Loveridge (1948), and W. C. Brown, manuscript, have considered *macrop*, *lutea*, and *solomonis* as synomyns of *thesaurensis*. The material before me seems to support this conclusion.

# Family Ranidae

#### CERATOBATRACHUS GUENTHERI Boulenger

Boulenger, Proc. Zool. Soc. London, p. 212, 1884.

BYU 7018, 7143-4 BYU 7147, 7449-51	Guadalcanal (D E. Beck), June, August, -1944 Guadalcanal (D E. Beck), January, 1945
BYU 8934 (47-A),	Russell Island (R. C. Pendleton), April, 1945
8936 (43-A) BYU 11019 (25-A)	Florida Island (R. C. Pendleton), Nov., 1944
Nos. 26-27A, 31A	Florida Island (R. C. Pendleton, January, 1945
Nos. 33A, 41A, 43-46A	Banik, (R. C. Pendleton), April, 1945 Russell Islands

This distinctive monotypic endemic frog has teeth on both the upper and lower jaws; vomerine teeth in two groups just back of the line between the choanae; tongue notched; pupil large and horizontal; head triangular, large, widest at spines on upper jaw just beneath the tympanum, which is larger and vertical. Interorbital space broad and concave. Folds or spines at tip of snout, over each eye, at the angle of the mouth and above the tympanum, on the forearm and the heel. Tips of fingers and toes only slightly enlarged.

fifth toe shorter than the third and toes with rudimentary web.

Length from snout to vent of the largest specimen in the collection is 69 mm.

The color of a live specimen as observed by Captain Beck is as follows: "The dorsal surface of the head and abdomen is unicolorous, dorsal surface of the legs maculate with dark and light tones of brown. The medial dorsal part of the body is a slightly darker color than the rest. The brown color is earthy in appearance. Ventrally the color has a tint of red in the brown with a denser punctation of yellowish steppling. There is a row of tiny dots along the edge of the lower jaw. The dorsal edge of the eye has a pale blue-green band. The iris is bronze and the pupil black."

## RANA PAPUA NOVAEBRITANNIAE Werner

Werner, Zool. Anz., Vol. 17 p. 155, 1894.

BYU 7053-55 Guadalcanal (D. E. Beck), July, 1944 BYU 7475-16 Guadalcanal (D. E. Beck), December, 1944

Three Guadalcanal specimens have been assigned to *R. p. novae-britanniae* by W. C. Brown (manuscript). They are all white bellied with backs which are light brown. Loveridge, 1948, comments on this form as follows: "Actually the white-bellied *Rana novaebritanniae* is perfectly distinct from the mottled-bellied *kreffti*, and its uniformly white underside appears to separate it also from *R. p. papua* Lesson."

The live color of this frog as observed by Dr. Beck is as follows: "The dorsum is olive-brown; around the tympanum and before the eyes is dark-brown, while that of the lateral area of the abdomen is greyish brown, the edge of the lower jaw is slightly mottled. The dorsal surface of the legs are light and dark brown in color. The undersurface of the body is a pale whitish-blue color with a tendency to produce an opalescent sheen. The iris ring of the eye is yellow bronze while the remainder is red. The pupil is a deep blue-black color."

# DISCODELES GUPPYI (Boulenger)

Boulenger, Proc. Zool. Soc. Lond., p. 211, 1884.

BYU 8912 (No. 32-A) Florida Island (R. C. Pendleton), March 13, 1945

Recently, Brown (manuscript) has proposed that *guppyi* be placed in the genus Discodeles which is one of the nine subgenera into which Boulenger divided the genus *Rana*. Kinghorn, 1928, gives a concise characterization of this species. The specimen discussed in

this report is a small one, 24 mm. from snout to vent, with hind leg 41 mm. in length. The vomerine teeth are in an oblique series behind the choanae. The "tips of the toes and fingers dilated into discs, the upper surfaces of which are separated from the lower by a crescentic or horseshoe-shaped groove; web not penetrating far between the outer metatarsals."

## PLATYMANTIS PAPUENSIS WEBERI Schmidt Schmidt, Field Mus. Nat. Hist., Zool. Vol. 18, p. 178, 1932.

BYU 8916 (23A) 8917 (22A) Guadalcanal (R. C. Pendleton), June 5, 1944

These two specimens 23 and 24 mm. in length from snout to vent agree well with Dr. Schmidt's description of specimens from Tulagi and Isabel Islands. The short oblique series of vomerine teeth close to the choanae, snout pointed with the nostrils much closer to its tip than the eye, the circular tympanum, upper eye lids regular, toes and fingers with small disks, toes without webs, and dorsum with five to six rows of ridges characterize the two specimens from the Tenaru River of Guadalcanal.

The color is grey with black blotches on the upper surface of the legs and over the ridges of the back. Ventral surface is white except on the chin where there are some dark blotches.

These two specimens were taken in "trash" in the Little Tenaru River by Mr. Pendleton.

# BATRACHYLODES VENTEBRALIS Boulenger

Boulenger, Proc. Zool. Soc. Lond. p. 337, 1887.

BYU 8915 (34A)	Banika	(R. C. Pendleton)	January, 1945
	Russell Islands		
No. 30-A	Russell Islands	(R. C. Pendleton)	
No. 35-A	Florida Islands	(R. C. Pendleton)	April 16, 1945

No vomerine teeth; tongue broadly attached, anteriorly elongate, posteriorly oval and not notched. Tympanum round, 1.5 mm. in diameter; pupil horizontal; snout short and obtuse; finger disks larger than those of the toes; toes only slightly webbed.

Color brown and grev matched dorsally, skin smooth; ventral surface white except for peppering on legs and chin, small tubercles on gular area. Length from snout to vent of specimen No. 8915 is 21 mm.

Mr. Pendleton collected the Banika specimens at an altitude of 200 feet in a sunny opening in the rain forest.

#### SERPENTES

# Family Typhlopidae

## TYPHLOPS ALUENSIS Boulenger

Boulenger, Proc. Zool. Soc. of London, p. 336, 1887.

Guadalcanal near	(E. Reimschiissel) August 5, 1944
Guadalcanal near	(Lt. Reibes) August 29, 1944 (D. E. Beck)
Tetere Area	(J. R. Heath) February, 1944
Guadalcanal, 1 mi. inland, Nalimbus R.	(Lowell Adams) June 7, 1944
Torokina, Bougain- ville Island, Solomon Islands	(W. L. Necker) (A. B. Gurney)
Tulagi, Solomon Islands	(K. R. Stevenson)
Guadalcanal, Doma Cove Solomon Islands	(Q. A. Muennink)
Malaita, Solomon Islands	(S. M. Lambert)
	Henderson Field Guadalcanal near Doma Cove area, Tetere Area Guadalcanal, 1 mi. inland, Nalimbus R. Torokina, Bougain- ville Island, Solomon Islands Tulagi, Solomon Islands Guadalcanal, Doma Cove Solomon Islands Malaita, Solomon

Mid-body scale rows twenty-two; urosteges twenty-two to twenty-three; nasal cleft extends to the posterior portion of the first upper labial; eyes distinct, showing through the large ocular scales which extend down between the second and third upper labial; snout rounded in a lateral view; nostrils lateral. Length largest specimen, University of California, No. 40752, 257 mm.; body diameter 7 mm.

Color dark brown on the back and sides, under surface, consisting of three rows of scales, yellowish.

#### TYPHLOPS BECKI Tanner

Tanner, Great Basin Naturalist, Vol. 9, pp. 15-16, Figs. 4 and 5' 1948.

BYU 7448 Guadalcanal, Tenaru
(D E. Beck) November 30, 1944
(E. Ramay)

Midbody scale rows twenty, transverse body scales two hundred and six; urosteges fourteen; head oval when viewed from above; snout projecting 1.8 mm. beyond the mental; rostral with parallel sides; nasal cleft extending to the anterior part of the second upper labial; prefrontal larger than the frontal; supraoculars about half the size of the parietals and in contact with the nasals, prefrontal. frontal, parietals, ocular and preocular; upper labials four; eye shielded by the ocular, which comes in contact with the second and

third labials; the preocular contacts the first and second labials. Body length one hundred twelve mm.; tail five mm.; diameter four and eight tenths mm.

Color above dark brown, ventral light brown head pale grey, eyes grey with black pupils, terminal spine of the tail small and blunt.

### TYPHLOPS INFRALABIALIS Waite

Waite, Rec. South Austr. Mus. I, pp. 35-63, Fig. 25, 1918.

BYU 7040 Guadalcanal (Geo. Nazaruk) June 21, 1944
Nalimbus River (Lowell Adams)
Solomon Islands (D E. Beck)

Mouth inferior, rostral and nasals projecting dorsally beyond the mental, nasal cleft extends to the posterior half of the first upper labial. No supranasals. Preocular not in contact with the ocular. An ocular, posterior ocular, subocular, and supralabial on an area normally covered by the ocular. Eye indistinct; supralabials four, infralabials three. Midbody scale rows twenty-eight, transverse body scales four hundred sixty-six, urosteges sixteen; anal five. Body length three hundred forty-four mm.; tail eight mm. body diameter just posterior to the anus six mm.

The eight to ten ventral scales are clear yellowish white while the eighteen to twenty side and back ones have brownish central spots surrounded by light borders. This gives a distinctly uniform spotted or checkered appearance.

#### TYPHLOPS ADAMSI Tanner n. sp.

Univer of Calif. Guadalcanal Nalimbiu June 6, 1944 No. 40753 River, Solomon Islands (Lowell Adams)

Type: Midbody scales twenty-six, gastrosteges four hundred fifty-one; urosteges seventeen; anal five; supralabials four; infralabials three; nasal cleft extending to the rostral and the anterior upper surface of the second supralabial; preocular and postocular fused into one scale which touches the posterior part of the nasal and the anterior part of the ocular; parietals large and in contact behind the frontal. Length of body one hundred forty-eight mm.; diameter three and one-half mm.

Color light brown with dark brown spots in center of scales on back and sides; ventral scales yellowish.

Adamsi may be distinguished from infralabialis as follows: Body scale rows 26; nasal cleft extending to nostril and the second supralabial; preocular and postocular fused into one scale, parietals large and in contact behind the frontal. The head scales are symmetrical.

Type Locality: Nalimbiu River, Guadalcanal, Solomon Islands. Collected by Lowell Adams, June 6, 1944. Type in the Herpetological collection of the Museum of Vertebrate Zoology, University of California at Berkeley, California.

I am pleased to dedicate this species to Mr. Lowell Adams who collected a number of interesting reptiles in the South Pacific area. I also want to thank Dr. R. Stebbins for the loan of museum specimens of Typhlops from the Solomon Islands.

# Family Boidae ENYGRUS CARINATUS (Schneider)

Schneider, Hist. Amph. II, p. 261, 1801.

	Guadalcanal, Solomon	(D E. Beck)	May 22, 1944
	Islands		
BYU 7103,	Guadalcanal, Solomon	(John Chattin)	June 27, 1944
7137-38	Islands	(D E. Beck)	
BYU 7148,	Guadalcanal, Solomon	(John Chattin)	October, 1944
7232	Islands	(D E. Beck)	
BYU 7246,	Guadalcanal, Solomon	(E. Reimschiissel)	August 5, 1944
7330	Islands		
BYU 7901	Guadalcanal, Solomon	(E. Reimschiissel)	August 5, 1944
	Islands		,

Midbody scale rows thirty-seven to thirty-eight; urosteges forty to forty-two; supralabials eleven to twelve; infralabials thirteen; anal undivided. Specimen No. 7138 has well developed visible bony spurs which are used in the movement of the snake. Two specimens were received alive from Guadalcanal, one of them No. 7901 lived eight months in a small cage, during this time it ate two bats.

The color of specimen No. 6961, which was captured by Captain Beck, was described as follows: "Dorsally the pattern is dark brown (earthy) while the lateral color is slate grey with a brownish tint. At the lateral and ventral contact scattered white and red scales are found with black spots on some scales, which are distributed so as to give a speckled appearance. The red and black scales, however, are found to be grouped so as to give a definite pattern on the outside edge of the ventral scales. The middle scales of the belly are white to cream with black speckling. The color extends to the anal region where the red scales and speckling discontinue. The chin is mottled grey. The eyes are speckled grey. The under surface of the terminus of the nose has black spots."

## Family Colubridae

#### BOIGA IRREGULARIS (Merrem)

Merrem, Bechst, Uebers, Lacep. IV, p. 239, 1802.

May 22, 1944

September 18, 1944

BYU 6962, Guadalcanal, Solomon (D E. Beck)
7041 Islands
BYU 7231, Guadalcanal, Solomon (J. Chattin)
7227 Islands (D E. Beck)
BYU 7248, Guadalcanal, Solomon (D E. Beck) September 18, 1944 7970 Islands

Rostral broader than deep, internasals shorter than the praefrontals; supralabials eight to ten; infralabials twelve to thirteen; midbody scale rows twenty-one; gastrosteges, average of six specimens, 229; urosteges, average of five specimens, 105 plus; the total length of the largest specimen No. 7231 is 1043 mm, the tail length being 242 mm.

#### AHAETULLA CALLIGASTER (Gunther)

Gunther, Ann. Nat. Hist., (3) XX, p. 53, 1867.

BYU 7039 Guadalcanal, Solomon (D. E. Beck) July 10, 1944 BYU 7118 (J. Johnson) (H. Hawkins) Islands August 10, 1944 Guadalcanal, Solomon Islands

Midbody scale rows thirteen; gastrosteges one hundred seventyeight and one hundred eighty-one; urosteges one hundred nineteen and one hundred forty; anal divided; supralabials eight; infralabials nine; preoculars one; postoculars two; loreal one; temporals two; length, No. 7118, 1101 (725 + 376) mm.

Color in life as recorded by Beck. "The dorsum of the anterior one fifth of the body is bright rust color. The remainder of the body is an olive green. The lateral patterns are very indistinct, but when the snake expands its body the color shows up to a greater extent The neck region laterally is orange red when the scales are spread apart. The edges of some of the scales are orange in color. There are also black lateral bands in the neck regions, this color seems to be due to the coloration of the body membrane."

The eyes are mottled bronze and brown. The upper part of the iris is mainly bronze. The pupil is round and black.

#### DENISONIA PAR (Boulenger)

Boulenger, Proc. Zool. Soc. London, p. 210, 1884.

BYU 7117, Guadalcanal, Solomon (D E. Beck) August, 1944 7247 Islands (R. T. Brice) BYU 7329 (D E. Beck) December, 1944 Guadalcanal, Solomon

Islands

Midbody scale rows fifteen; gastrosteges one hundred sixty-five to one hundred sixty-six; urosteges fifty-three; anals two; supralabials seven; infralabials seven; preoculars one; postoculars two. The total length of specimen No. 7117 is 744 (630 + 114) mm.

This is a fairly common species on Guadalcanal.

#### LATICAUDA COLUBRINA Schneider

Schneider, Hist. Amph., I. p. 238, 1799.

BYU 7061 Guadalcanal, (D.E. Beck) July 30, 1944 Solomon Islands

BYU 7328 Russell Island, Solomon Islands (Major R. T. Brice) October 28, 1944

Midbody scale rows twenty-three; gastrosteges two hundred seventeen to two hundred twenty-one; urosteges forty-one to forty-three; anal two; supralabials seven; infralabials nine; preoculars one; postoculars two; temporals one and two. The total length of specimen No. 7328 is 373 (289 + 44) mm.

The color in life as recorded by Captain Beck is as follows: "The yellow on the anterior dorsum of the head and the first ring back of the black head patch as well as the lateral hue of the upper jaw is distinctive. The tip of the flattened tail is pale cream color. The black bands are broadened dorsally and narrowed ventrally except the tail bands which are broadened laterally. There is a pale yellow spot on the center of the dorsal black head shield.

"The eye is small, the iris is a mottled pale greyish, the area outside of the iris is dark brown."

#### HYDROPHIS CYANOCINCTUS Daudin

Daudin, Hist. Nat. Rept. VII, p. 383, 1803.

BYU 7861 Guadalcanal, Solomon Islands (D E. Beck), March, 1945

Rostral broader than deep with marginal grooves; nasal shorter than the frontal, twice as long as the suture between the praefrontals; praefrontals in contact with the second supralabial; one preocular; two postoculars; temporals three and one; eight upper labials, second largest, third, fourth and fifth entering the eye; infralabials ten and nine; both pair of chin shields in contact; body scale rows twenty-seven anterior thirty-seven at midbody, thirty-three posterior near anus; anals two pairs; gastrosteges three hundred thirty-four; urosteges forty-three; scales smooth and sub-imbricate.

Color of preserved specimen black above with forty-seven light bands extending from the dark back to the ventral surface. A single row of larger black gastrostege scales separates the light bands. The head and chin are light colored. The tail for the length of twenty-two scales is black. Total length is 1028 (927 + 101) mm.

This seems to be a new record for Guadalcanal and the Solomon Islands. De Rooji, however, reports *cyanocinctus* for New Guinea. Kinghorn, 1929, and Schmidt, 1932, reported specimens of *Chersydrus granulatus* from Malaita and Isabel Islands which constitute rare records for the Solomon Islands.

## SQUAMATA - SAURIA

## Family Gekkonidae

#### GYMNODACTYLUS PELAGICUS (Girard)

Girard, Proc. Ac. Philad. 1857, p. 197.

BYU 6966, 6987-88 Guadalcanal (D.E. Beck) July-August, 1944 BYU 7021, 7101, 7155 Guadalcanal (D.E. Beck) May-June, 1944 BYU 7290-91 7467, Guadalcanal (E. Reimschiissel) January, 1945

A comparison of the specimens listed above with those reported by the writer from Morotai show a similarity in size, coloration, and scalation. De Rooij does not list this species from Halmahera or Morotai.

The following observations on the habits and color in life of specimens collected by Captain Beck are as follows: "Specimens of this lizard were collected on tree trunks, screen door of the insectory, under logs and debris on the forest floor. The skin is delicate which necessitates handling the specimens with care in order that it will not be broken. The ventral surface is violaceous while the dorsal surface is brown with pale yellow tiny spots scattered about. This species is secretative and hard to capture unless exposed by the turning over of logs and rocks."

#### GEHYRA OCEANICA (Lesson)

Lesson, Voyage Coquille, Zool. II, Pt. I, 1830, p. 42.

BYU 6967, 7062-63
BYU 7059, 7132-34
BYU 7473, 7748, 7749
BYU 7746-47
BYU 7746-47
Guadalcanal (D E. Beck)
Guadalcanal (D E. Beck)
June, July, 1944
Coudalcanal (D E. Beck)
June, July, 1944
Segi Point, (Lt. (J.G.) C. O.
New Georgia
Island

The life color of this lizard was reported by Captain Beck as follows: "In the screen house the color was silvery to grey with very indistinct pale lemon yellowspots on the dorsum of the neck

and shoulder region and laterally on the abdomen. In the laboratory the whole animal assumed a darker hue. The above markings become more definite. A distinct brown speckling was apparent on the dorsum of the whole body. The dorsum of the head is a pale, pastel green. The markings above the hind leg region and the abdomen are a pale violet color."

The whole undersurface of the body is cream colored, except the feet of the fore and hind legs, the posterior surface of the hind legs and the undersurface of the tail which are a salmon pink color.

The eyes are a bright color with a vertical black irregularly

shaped pupil. The tongue is a bright flesh pink.

This lizard is common in and about the camp buildings. It feeds upon insects found on the screens and walls of the tents.

#### LEPIDODACTYLUS LUGUBRIS (D. & B.)

Dumeril and Bibron, Erp. Gen. III, 1836, p. 304.

	7004-5, 7008 7010, 7046, 7056-57		(D E. Beck) ,D E. Beck)	
			(J. Chattin)	
BYU	7064-65, 7115	Guadalcanal	(D E. Beck)	August, 1944
BYII	7253	Guadalcanal	(D.E. Beck)	May. 1944

The guadalcanal specimens agree with those from Morotai in morphological characters, the lamellae and scansors of the fourth toe are as follows: Nos. 7004-9+4; 7005-6+5; 7008-5+4; 7010-10+2; 7056-6+4. The supralabials are 10 to 12 in number; infralabials 10 to 12. Ground color grey to brown with scattered small blackish areas on the back and sides; venter white to pinkish.

#### LEPIDODACTYLUS GUPPYI Boulenger

Boulenger, Proc. Zool. Soc. Lond., 1884, p. 210.

BYU 7047 Guadalcanal, Solomon Islands D. E. Beck) July, 1944

Rostral wide extending between the nostril cavities, not high, not any higher than the supralabials; supralabials twelve, infralabials eleven; mental small wedge shaped, one third as wide as the rostral. Submentals irregular five rows of round enlarged scales, head broad and shorter than in lugubris; eleven lamellae under the median finger and thirteen under the median toe; digits with small web at base and moderately dilated. Length 73 (41  $\pm$  32) mm.

The following observations on the color in life of this specimen are taken from Captain Beck's field notes number 214, July 21, 1944: "This gekko may or may not be a different specimen than I have

taken before. It does have a different color pattern than the regular run of gekkos I have observed or collected.

"Dorsally it is grey: the color being due to light splashes and pin point speckling of grey. The tail has three light color bands. These are five distinct black dots at the ventro-lateral contact. There are three dorso-lateral black dots, the first at the neck region, the last one approximately above the first vento-lateral dot. There are lateral pouch-like swellings in the region, these swollen regions are cream colored and splashed with light brown markings. The eyes are bronzed flecked with brown. Extending posteriorly at the ventro-posterior margin of the eye is a black line. It reaches about half way to the ear. Ventrally the body is pale with fleckings of brown. When the specimen was placed in 70 per cent alcohol the whole body became much lighter in color."

#### LEPIDODACTYLUS WOODFORDII Boulenger

Boulenger, Proc. Zool. Soc. 1887, p. 334.

BYU 7145-46	Guadalcanal	(D E. Beck)	June, 1944
BYU 7254-7292-93	Guadalcanal	(D E. Beck)	August, 1944
BYU 8894	Guadalcanal	(D E. Beck)	September, 1944

Specimens are all small; about 47 mm. total length, tail minus in some specimens. With distinct zigzag black cross bands on the grey color of the back; digits without web, twelve supralabials, ten infralabials; a faint black streak extending from the nostril through the eye to the neck.

These specimens were considered as immature forms of *Gehyra* coeanica by Captain Beck.

Dr. Walter C. Brown is making a careful study of the species of Lepidodoctylus and has recently informed me that he suspects L. woodfordii may be a synonym of L. lugubris.

#### PSEUDOGEKKO SHEBAE Brown and Tanner

Brown & Tanner, The Great Basin Naturalist, Vol. 9, Nos. 3-4, 1948, pp. 41-45, figs. 1 and 2.

BYU 7002, Type Guadalcanal (John Chattin) May 31, 1944 Specimen Lunga River Area (D E. Beck)

This species, represented by a unique specimen, is far removed from the genotype area which is Batan Province, Luzon Island, Philippine Islands. It is also interesting to note that the genotype species *compresicorpus* is based on a single female specimen. The specimen has probably been destroyed since Dr. Taylor deposited it in the Philippine Bureau of Science collection in 1915.

Shebae differs from compresicorpus mainly in the number of supralabials, 10 as compared to 19 or 20, infralabials, 9 as compared to 16, the presence of enlarged chin shields, and the undivided condition of the terminal lamella. Unfortunately, only one specimen of this species was collected. Captain Beck reported that he thought this species was common around the camp. It may be easily confused with other species of gekkos in that area. The type specimen of shebae is deposited in the Herpetological Collections of the Brigham Young University.

# Family Varanidae

## VARANUS INDICUS (Daudin)

Daudin, Rept. III, p. 46, 1802.

BYU 7136 Guadalcanal (D E. Beck) June 16, 1944

This is the only representative of this family in the Solomon Islands. The long snout with the nostril near the tip, the fairly large head and supraocular scales, the arrangement of the almost square abdominal scales in rows, the strong limbs with long digits and sharp claws, the compressed tail with the dorsal scales keeled are the most noticeable characteristics of this species. The size is 915 mm. in length.

Comments on the color and food of this specimen are taken from Captain Beck's notes as follows: "This animal which is black with a speckled yellow pattern was found in a heavily wooded thicket near the swampy region. The natives were clearing the wooded spot when the lizard was seen. These lizards are common but are swift in escape. When captured alive they make painful scratches on the captor, with their claws, which are long and sharp. This lizard is very much of an arboreal animal.

"Checking the stomach, I found the remains of the common land crab. bird feathers, and the tail of a striped skink."

# Family Scincidae

## CORUCIA ZEBRATA Gray

Gray, Proc. Zool. Soc. Lond. 1885, p. 218, pl. 8.

BYU 7119 Guadalcanal BYU 7120 Guadalcanal (Anthony Ross) (D E. Beck) (J. Johnson) (E. Ramey) June 30, 1944 June 30, 1944

(E. Ramey) (H. Hawkins) Rostral small, between the nostrils, two-thirds as wide as high, frontonasal large, hard and somewhat polished, as wide as high, 18 mm.; two large temporals; eight supralabials, the seventh as long as the fourth, fifth and sixth; seven infralabials, the fifth 15 mm. long on specimen 7120; mental small, the submental much larger; eyelids scaly; nostril in a single nasal which is in contact with the rostral, first supralabial, anterior loreal and frontonasal; tympanum large; body scales about twice as large dorsally as ventrally, 40 around the middle of the body; digits well developed with large, sharp claws, the fourth toe half as long as the leg and with 22 lamelae; tail long and prehensile, total length of specimen No. 7119,610 (255 + 355) mm. and specimen No. 7120,485 (167 + 318) mm.

The life color of this species was observed by Captain Beck. The following has been extracted from his field notes: "The color pattern is dorsally a series of grey-green cross patches with dark brown scales scattered through these areas. Narrower cross lines of blue-grey separate the larger areas. In one specimen these lines are pale yellow-green. The larger areas are brownish green. This color arrangement also extends on the dorsal surface of the legs, tail and feet. The dorsal scales of the head have a tendency to be splashed with yellow instead of blue, blue-grey, or yellow-green.

"Ventrally the feet are a mustard yellow with the color extending out part way on the toes. The ventral part of the tail, abdomen, and thorax is a grey-blue as on the dorsum of the body. There is an indistinct patterning of the ventral area proper by faint grey-green lines. The scales of the chin are yellow-green.

"The eyes are greenish with a black pupil."

Captain Beck kept one of these specimens in captivity for about two weeks. "I find it is quite docile in captivity. Only when it has been molested has it given any signs of protecting itself. Upon being teased it leans to one side, backs away using its tail where ever it can attach itself, then opens its powerful mouth. Standing high on its short front legs, holding its mouth open it is ready to firmly bite onto any object getting close enough to be clamped on to. Closing the mouth it occasionally thrusts its short stubby pink colored nonforked tongue out."

This lizard which is endemic to the Solomon Islands feeds upon Ieaves of trees at night and sleeps in the cavities of the trees during the day. The two specimens before me are perfect ones.

#### PEDIPORUS SCHMIDTI (Burt)

Burt, Am. Mus. Novitates No. 427, June, 1930, p. 3.

BYU 6973-4, 6975	Guadalcanal	(E. Reimschiissel) August, 1944
BYU 7006-7, 7011-13	Guadalcanal	(E. Reimschiissel) May, 1944
BYU 7028-37	Guadalcanal	(E. Reimschiissel) September, 1944
BYU 7076-80, 7111	Guadalcanal	(E. Reimschiissel) July, 1944
BYU 7153-54, 7156-58	Guadalcanal	(E. Reimschiissel) September, 1944
	Guadalcanal	(E. Reimschiissel) July, 1944
BYU 7468-71, 7764	Guadalcanal	(E. Reimschijssel) July, 1944

Rostral one third as high as wide; nostril in large angular scale; four large supraoculars; mental wide, postmental slightly longer than the large contiguous chin shields; tympanium large and unguarded; head wide at the temporal region; five rows of large keeled ventral scales; two large preanal scales; lateral and dorsal scales heavily keeled and spiny, two dorsal rows of large scales; an average of 30 to 33 from occupit to base of tail; 29 to 30 ventral scales from large chin shields to preanal scales. Scales of the head heavily striated; 18 to 20 lamellae under the fourth toe of the hind foot. Length 101 (40 + 61) mm. The fifty-three specimens reported above are in very good condition. Color of dorsal dark brown, ventral light brown, tail and lateral body with light bands and stripes.

## LYGOSOMA (SPHENOMORPHUS) CRANEI Schmidt Schmidt, Field Mus. Nat. Hist. Vol., 19, No. 9, p. 182, 1932.

		_	
BYU 7088,7297, BYU 7299	Guadálcanal Tenaru River Area		August, September,
		(H. Hawkins)	1944

Rostral three fourths as high as wide; no supranasals; prefrontals in contact along a median suture; frontal long, longer than the combined frontoparietal and interparietal; parietal large; lower eyelid scaly; supralabials eight, infralabials seven; mental, submental and three pairs of chin-shields; twenty-six to twenty-nine lamellae under the fourth toe, thirty-three scales around the middle of the body; scales smooth; length 158 (60 + 98) mm.

This long tailed skink has a light brown ground color with whitish bands which extend from the sides over the back and tail, giving the specimen a banded appearance; on the sides are some dark bars which are very noticeable. The ventral parts are light yellowish with some brown scales on the under surface of the tail.

# LYGOSOMA (SPHENOMORPHUS) BIGNELLI Schmidt Schmidt, Field Mus. Nat. Hist. Vol. 18, No. 9, p. 183, 1932.

BYU 6994-99	Guadalcanal	(D E. Beck)	June, 1944
	Tenaru River	(E. Reimschiissel)	July, 1944

BYU 7069-70	Guadalcanal	(D E. Beck)	August, 1944
BYU 7087, 7089	Guadalcanal	(I. Johnson)	
		(H. Hawkins)	
BYU 7109-10, 7152		(E. Reimschiissel)	August, 1944
BYU 7249-50, 7257		(E. Reimschiissel)	August, 1944
BYU 7305, 8892	Guadalcanal	(D E. Beck)	September, 1944

Rostral one third wider than high; snout pointed; no supranasals; frontal elongate with a narrow contact with frontonasal; nostril in a single nasal; eyelid scaly; ear opening large; four supraoculars; six supralabials, six infralabials. Mental scales large; submental and three pairs of chin shields large; lamellae 18 under the fourth toe; body scales smooth twenty-two to twenty-three rows around the body at the middle. Length 73 (33 + 40) nm. This is a small species. The specimens listed above are about 65 to 80 mm. in total length.

The color of preserved specimens is a dark brown ground color with small white areas along the sides of the body, over the tail and less over the back. An irregular light band of about two scales in width along the sides. The white spots are due to the distal portion of one to three scales being white. The underside is a cream to white in color on the throat, belly, and portion of the underside of the tail. There is, however, some suffusion of brown scales among the white ones on the underside of the tail.

## LYGOSOMA (LYGOSOMA) SOLOMONIS Boulenger

Boulenger, Proc. Zool. Soc. London, p. 334, 1887.

BYU 6976, 6989-93	Guadalcanal	(D E. Beck) May, 1944
BYU 7014, 7022-27	Guadalcanal	(D E. Beck) June, 1944
BYU 7067-8, 7071-2	Guadalcanal	(E. Reimschiissel) July, 1944
BYU 7083-6, 7095-6	Guadalcanal	(J. Johnson) August, 1944
		(H. Hawkins)
BYU 7151, 7251, 7300	Guadalcanal	(D E. Beck) August, 1944
, ,		(E. Reimschiissel)
BYU 7302-4, 7307-8	Guadalcanal	(J. Johnson) August, 1944
,		(H. Hawkins)
BYU 7474, 8895	Guadalcanal	(D E. Beck) January, 1945

Rostral twice as wide as high, in contact with the first supralabial, nasal and frontonasal; internasals not present; prefrontals separated by the frontal, which is in contact with the first and second supraoculars; parietals large and bordered by two to six pairs of nuchals. Lower eyelid scaly. Ear opening large without lobules, supralabials seven, infralabials six; mental large, submental and three rows of chin shields; twenty-six to twenty-eight scale rows around the body; sixteen lamellae under the fourth toe; legs and digits short. Length 113 (49 + 64) mm.

Color of live specimens according to Captain Beck's notes is as follows: "Dark brown with light brown speckling under surface of body, light tan between fore legs and light rust for a short distance behind the rear legs."

# LYGOSOMA (LYGOSOMA) CONCINNATUM Boulenger Boulenger, Proc. Zool. Soc. London, p. 335, 1887.

BYU 6977-79,	Guadalcanal	(D E. Beck)	July, 1944
7073-4	Tenaru River area	(E. Reimschiisse	21)
BYU 7091-2,	Guadalcanal	(I. Johnson)	September, 1944
7149-50		(H. Hawkins)	
BYU 7159, 7298,	Guadalcanal	(H. Hawkins)	January, 1945
7466		(I. Johnson)	

Rostral about twice as wide as high; no supranasal; frontanasal broader than high; nostril in a single nasal; four supraoculars; six to seven supralabials and six to seven infralabials, fifth supralabial larger and entering the orbit; ear opening oval and large, lower eye lid scaly; body scales smooth, forty-two around the body at the middle; lamellae under 4th toe, twenty-two to twenty-four; length 144 (62 + 82) mm.

Color a dark brown with zig-zag dark spots or blotches on the back; sides with white spots in the brown ground color; under surface light with some brown spots on the tail; black spots edged with white between the tympanium and shoulder, the dorsal scales with a metallic scheen. This species is common under logs where the soil is moist, but not too wet.

# LYGOSOMA (LEIOLEPISMA) ANOLIS (Boulenger) Boulenger, Ann. Mag. Nat. Hist., (5) XII, p. 161, 1883.

BYU 6964, 7075	Guadalcanal	(E. Reimschiissel) August, 194	2
BYU 7252, 7264	Guadalcanal	(D E. Beck) August, 1944	
BYU 7268, 7765	Guadalcanal	(D.E. Beck) Jan. Feb., 1945	

Rostral wide and broad, nostril in one nasal scale; frontonasal large, prefrontals in contact, five supraoculars, large almost in contact on the median line. Mentum, submentum and three pairs of chin shields large; median dorsal pair of scales large, thirty-three around the middle of the body; digits with proximal lamellae expanded, distal ones contracted, fourth toe with seven to nine contracted and fourteen to eighteen expanded lamellae; length 108 (53 + 55) mm.

Color black and sides light to cream, belly white, head with some black.

# LYGOSOMA (LEIOLEPISMA) NOCTUA Lesson

Lesson Voy. "Coquille" Zool. 2, p. 48, 1830.

BYU 7000, 7009, 7060	Guadalcanal	(D E. Beck) June, 1944
	Tenaru River	
BYU 7093, 7113, 7294	Guadalcanal	(I. Johnson) July, 1944
BYU 7667, 7867, 8890-1	Guadalcanal	(H. Hawkins) August, 1944
BYU 8893	Guadalcanal	(E. Reimschiissel) Sept., 1944

Rostral twice as broad as high; frontonasal and frontal in contact and long; supraocular four, large, the first two in contact with the frontal; nostril in one nasal scale; seven supralabials and six infralabials; lower eye lid with transparent disc; ear opening medium with out lobules; mental and submental small; twenty-four to twenty-eight scales around the middle of the body. Eighteen to twenty-two lamellae under the fourth toe, average length of five specimens  $83 (39 + 44) \, \mathrm{mm}$ .

Color, a dorsal and lateral white line bordered by dark brown rows of scales; under surface white; tail with some cross bars. There is some variation in these specimens especially in the head scales and color. A large series from the Solomon Islands should be carefully studied. The Morotai and Admiralty Islands specimens are darker in color.

#### EMOIA CYANURA (Lesson)

Lesson, Zool. in Duperry, Voyage antour du Monde dur La Coquille, Vol. 2 pt. 1, p. 47, 1830.

BYU 6969-71	Guadalcanal	(D E. Beck) May 16, 1944
BYU 6980-86, 7003	Guadalcanal	(D E. Beck) June 2, 1944
BYU 7043-45, 7082	Guadalcanal	(D E. Beck) July, 1944
BYU 7112-7114, 7125	Guadalcanal	(E. Reimschiissel) August, 1944
BYU 7131, 7255, 7258-60	Guadalcanal	(J. Johnson) August, 1944
,		(H. Hawkins)
BYU 7256, 7301, 7306	Guadalcanal	(D.E. Beck) September, 1944

Rostral twice as wide as high; nostril between three small scales, the nasal supranasal and postnasal; frontonasal in broad contact with the rostral, broader than long; four supraciliaries; lower eyelid with a transparent disk; ear opening oval, with several short anterior lobules; seven supralabials; six infralabials; mental large. Scale rows around the middle of the body twenty-seven to thirty, 2 (27), 14 (28), 4 (29), 6 (30); lamellae on the underside of the fourth toe are two kinds, the proximal ones are broad and smooth, while the distal ones are slightly comprised and sharp edged, the proximal ones vary from sixty-one to seventy-five and the distal ones from

six to seven in number. The average body and tail length is from 120 to 138 mm.

The dorsal color is dark brown to black with three yellow to white stripes.

Captain Beck, while searching for coconut shells which contained water where mosquitoes may be breeding, found several shells which contained lizard eggs. Some of these eggs were placed in a pill box and in two days, two eggs had hatched. These lizards and some of the unhatched eggs and shells were preserved. They are listed under No. 7255. One shell which is in perfect shape, from which a lizard hatched and escaped from a hole 4 mm. in diameter in the side of the egg, is 11 mm. in length and 7 mm. in diameter; one other shell is 14 mm. in length and 7 mm. in diameter. The two young lizards were preserved two days after hatching, one of them has a length of 59 (21 + 38) mm. and the other 58 (22 + 36) mm. It would appear that the young lizards are about one half the adult length at the time of hatching.

#### EMOIA NIGRUM (H. and J.)

Hombron and Jacquinot, Voy. au Pole Sud. Rept. 1842, p. 11.

BYU 6965, 6919, 7001	Guadalcanal	(D.E. Beck) May, 1944
BYU 7081, 7094, 7097-99	Guadalcanal	(J. Chattin) (I. Johnson) August, 1944
BYU 7100, 7106-8, 7295 BYU 7296, 7766, 8888		(H. Hawkins) August, 1944 (E. Reimschiissel) July, 1944 (D. E. Beck) September, 1944

Rostral two-thirds as high as wide, supranasal small; nostril between prenasal, postnasal, and supranasal; four supraoculars; frontonasal in contact with the rostral; prefrontals and frontal combined length equal to length of frontoparientals and interpariental; transparent disc in lower eye lid; six to seven supralabials, the fifth one larger and beneath the eye; six infralabials; mental, submental and first pair of chin shields about equal in length. Scales smooth, dorsals largest, thirty-one to thirty-seven around the middle of the body; lamellae thirty-one to thirty-six on under surface of fourth toe. Average length of eight specimens is 236 (87 + 149) mm.

Color dark brown above and light pink to cream below in adults. In young specimens the back is golden to light brown in color.

The following is from Beck's notes; "Chattin and I caught these specimens in a coconut grove. They were first observed in a grassy area and then caught as they tried to escape under scales of a coconut tree which was in the process of decay."

## CHECK LIST OF SOLOMON ISLANDS AMPHIBIANS AND REPTILES

Synoptic studies of the amphibians and reptiles of the Solomon Islands have been made by Boulenger, 1884-90; Barbour, 1921; Kinghorn, 1928; Burt, 1932; and Schmidt, 1932. Aside from the above are many recent, scattered comments and descriptions of species of the fauna of this archipelago. In making this study, I have found that the following list has been of great help. It is presented with no claim to completeness, but with the hope that it may be of some value to future students of the amphibians and reptiles of this area.

#### **AMPHIBIA**

## Family Bufonidae

GENUS and SPECIES BUFO Laurenti, Syn. Rep. 1768, p. 25 LOCALITY — ISLANDS

1. MARINUS (Linnaeus)

Guadalcanal.

## Family Hylidae

HYLA Laurenti, Syn. Rept. 1768, p. 32

2. THESAURENSIS Peters macrop Blgr. lutea Blgr. solomonis Vogt

Guadalcanal, Mono, Bougainville, Fauro, Isabel, New Georgia, Russell, Tulagi, Malaita.

PALMATORAPPIA Ahl, S.B. Ges. Naturf. Fr. Berlin, p. 113, 1927.

3. SOLOMONIS (Sternfeld) Buka.

## Family Ranidae

CERATOBATRACHUS Boulenger Proc. Zool. Soc. London, p. 212, 1884.

4. GUENTHERI Blgr.

Guadalcanal, Russell, Florida, Bougainville, Choiseul, Kulambangara, Mono, Ronongo, Shortland, Vella Lavella.

CORNUFER Tschudi, Mem. Soc. Sc. Nat. Neuchatel, II, p. 28, 1839.

5. CORRUGATUS A. Dum.

Bougainville, Choiseul, Ronongo, Mono.

6. NECKERI Brown and Myers Bougainville.

7. GUPPYI (Blgr.) Florida, Guadalcanal, Isabel.

RANA Linnaeus, Syst. Nat. 10 Ed. p. 210, 1758.

8. PAPUA NOVAEBRITAN-NIAE Werner

NIAE Werner Guadalcanal, Bougainville. 9. KREFFTI Blgr. Mono, Bougainville.

DISCODELES Boulenger, Ann. Mag. Nat. Hist (9) I, p. 238, 1918.

10. BUFONIFORMIS Blgr. opisthodon Blgr.

opisthodon Blgr. Rendova, Ronongo.

11. GUPPYI Blgr. Fide W. C. Brown, manuscript. Rendova, Ronongo.

Isabel, Florida, Treasury, Bougain-ville, Kulambangara.

Bougainville, Fauro, Choiseul, Mono,

Alu, San Cristobal, Isabel, Tulagi,

Guadalcanal, Malaita, Ronongo.

PLATYMANTIS Gunther, Cat. Batr. Sal. Brit. Mus. 90, 93, 1858.

12. SOLOMONIS Blgr. Isabel.

13. PAPUENSIS WEBERI Tulagi, Guadalcanal. Schmidt

14. MYERSI Brown Bougainville.

HYPSIRANA Kinghorn, Rec. Austral. Mus. XVI, p. 130, 1928.

15. HEFFERNANI Kinghorn Isabel.

BATRACHYLODES Boulenger, Proc. Zool. Soc. London, p. 337, 1887.

16. VERTEBRALIS Blgr. Russell, Florida, Isabel. chaperina friedericii Sternfeld Buka

#### REPTILIA

Squamata - Serpentes

Family Typhlopidae

TYPHLOPS Schneider, Hist. Amph., II, p. 339, 1801.

17. ALUENSIS Blgr.
T. philococos Werner

18. BECKI Tanner Guadalcanal.
 19. OLIVACEUS REDUNCUS San Cristobal, Guadalcanal.
 Barbour

20. CUMINGII MANSUETUS San Cristobal.

21. INFRALABIALIS Waite
22. ADAMSI Tanner
23. BERGI Peters
Malaita, Guadalcanal.
Guadalcanal.
New Georgia.

24. SOLOMONIS Parker Bougainville.

## Family Boidae

ENYGRUS Wagler, Syst. Amph. p. 166, 1830.

166, 1830. 25. CARINATUS Schneider

Santa Ana, San Cristobal, Guadalcanal.

26. AUSTRALIS (Montrouzier)

San Cristobal, Santa Ana.

27. BIBRONII H. and J.

Solomon Islands. Bougainville.

28. ASPER (Gunther)

Erelophis asper Gunther

## Family Colubridae

CHERSYDRUS Cuvier, Reg. Anim. II, p. 75, 1817.

29. GRANULATUS Schneider Malaita, Isabel.

BOIGA Stejneger, Proc. Biol. Soc. Wash. XV, p. 15, 1902.

30. IRREGULARIS (Merrem)

Coluber irregularis

Merrem

Bougainville, Florida, Guadalcanal, Isabel, Mono, Ronongo, Narovo, Rendovo.

Dipsadamorphius irregularis Blgr. Boiga irregularis Stejneger

AHAETULLA Link, Beschr. Nat. Samml. Rostock, (2), 78, 1807.

31. CALLIGASTER (Gunther)

Dendrophis calligaster

Gunther

Dendrophis salomonis

Gunther.

Guadalcanal, Ugi, Bougainville, Choiseul, Fauro, Florida, Gizo, San Cristobal, Rendova. Malaita.

MICROPECHIS Boulenger, Brit. Mus. Cat. Snakes, III, p. 347, 1896.

32. ELAPOIDES (Boulenger)

Hoplocephalus elapoides
Blgr.

Florida.

DENISONIA Krefft, Proc. Zool. Soc. London, p. 321, 1869.

33. PAR (Blgr)

Hoplocephalus par Blgr.

Hoplocephalus melanurus

Blgr.

Guadalcanal, Isabel, Faro.

Denisonia melanurus Blgr. 34. WOODFORDII (Blgr.)

Hoplocephalus woodfordii
Blgr.

New Georgia, Rendova.

Denisonia woodfordii Blgr.

LATICAUDA Laurenti, Syn. Rept. p. 109, 1768.

35. COLUBRINA Schneider *Hydrus colubrinus* 

Bougainville, Buka, Isabel, Guadalcanal, San Cristobal, Choiseul.

Schneider

Platurus colubrinus Blgr.

36. CROCKERI Slevin

Rennell.

PELAMYDRUS Stejneger, Proc. U.S. Nat. Mus. XXXVIII, p. 111, 1910.

37. PLATURUS Linnaeus Anguis platura L. Hydrus platura Blgr. Solomon Islands.

PARAPISTOCALAMUS Roux, Vehr. Naturf. Ges. Basel, 45, p. 78, 1934.

38. HEDIGERI Roux

Bougainville.

HYDROPHIS Latreille, Suite a Deterville Ed. Buffon, Rept., IV, p. 193, 1801.

39. CYANOCINCTUS Daudin

Guadalcanal.

## Loricata

# Family Crocodylidae

CROCODYLUS Gronovius, Zooph., I, 10, 1763.

40. POROSUS Schneider

Guadalcanal, Isabel.

# Squamata - Sauria

# Family AGAMIDAE

GONOCEPHALUS Kaup, Isis (Oken) p. 590, 1825.

41. GODEFFROYI (Peters) Bougainville, Santa Ana, San Cristo-Lophura godeffroyi Peters bal.

# Family Gekkonidae

GYMNODACTYLUS Boulenger, Brit. Mus. Cat. Liz. I, p. 22, 1885.

42. PELAGICUS (Girard)

Guadalcanal, Isabel.

43. LOUISIADENSIS De Vis Solomon Islands. Gymnodactylus loriae Blgr.

G. olivii Garman

GEHYRA Gray, Proc. Zool. Soc. London, II, p. 100, 1834.

44. OCEANICA (Lesson) Gehyra vorax Girard. Bougainville, Mono, Guadalcanal, San Cristobal.

Buka.

45. MUTILATA Wiegm.

LEPIDODACTYLUS Fitzingen, Syst. Rept. p. 98, 1843.

46. LUGUBRIS (Dum. and Bibr.)Guadalcanal.

47. GUPPYI Blgr. Guadalcanal, Faro, Isabel, Whitney.

48. WOODFORDII Blgr. Faro, Guadalcanal

GEKKO Laurenti, Syn. Rept. p. 43, 1768.

49. VITTATUS Houttuyn Guadalcanal, Santa Ana, Bougainville, Ugi, New Georgia.

PSEUDOGEKKO Taylor, Bur. Sci. Publ. No. 17, p. 103, 1922.

50. SHEBAE Brown and Tanner Guadalcanal.

#### Family Varanidae

VARANUS Merrem, Tent. Syst. Amph. p. 58, 1820.

51. INDICUS (Daudin) Guadalcanal. Tupinambus indicus Daudin

#### Family Scincidae

CORUCIA Gray, Proc. Zool. Soc. London, p. 217, 1885.

52. ZEBRATA Gray Guadalcanal, Ugi, Santa Ana, Isabel.

TRIBOLONOTUS Dumeril and Bibron, Erp. Gen. V, p. 346, 1839.

53. PONCELETI Kinghorn Solomon Islands.

PEDIPORUS Roux, Verh. Naturf. Ges. Basel, 41, p. 129, 1930.

54. BLANCHARDI (Burt) Choiseul.

Tribolonotus blanchardi
Burt

55. SCHMIDTI (Burt) Beagle, Guadalcanal, Bougainville.

\*Tribolonotus schmidti\* Burt\*

DASIA Gray, Ann. Nat. Hist., II, p. 331, 1839.

56. SMARAGDINUM PERVIRI- Isabel, New Georgia, Malaita, DIS Barbour Guadalcanal, Bougainville.

RIOPA Gray, Ann. Nat. Hist. II, p. 332, 1839.

57. ALBOFASCIOLATA (Gunth- Guadalcanal, Faro, Malaita, Ugi, er) San Cristobal.

Lygosoma striato-fasciatum

Lygosoma striato-fasciatus Ogilby.

LYGOSOMA Hardwick and Gray, Zool. Journ. III, (10), p. 228, 1857.

SOLOMONIS Blgr.

62. (LYGOSOMA) San Cristobal, Ugi, Faro.
WOODFORDI Blgr.

63. (LYGOSOMA) Guadalcanal, Faro, New Georgia, CONCINNATUM Blgr. Malaita, Tulagi, Isabel.

Sphenomorphus concinnatum Blgr.

Lygosoma (Otosaurus) wolfi Sternfeld

64. (LEIOLEPISMA) ANOLIS
(Blgr.)

Lipinia anolis Blgr.

Lygosoma anolis Blgr.

Leiolepisma anolis Blgr.

65. (LEIOLEPISMA) NOCTUA Guadalcanal, New Georgia.

EMOIA Gray, Cat. Lizards Coll. Brit. Mus., p. 95, 1845.

66. CYANOGASTER (Lesson) Guadalcanal, San Cristobal, Santa
Scincus cyanogaster Lesson
Lygosoma cyanogaster
Blgr.

67. CYANURA (Lesson) Guadalcanal, Ugi, San Cristobal, Malaita.

68. NIGRUM Hombrom and Jacquinot San Cristobal. San Cristobal.

Lygosoma nigrum Blgr.
69. MANNI Brown San Cristobal.
70. WHITNEYI Burt Shortland.
71. FLAVIGULARIS Schmidt Isabel.

72. WERNERI (Vogt) Kulambangara.

Lygosoma Cyanurum Vogt

Lygosoma Werneri

Triviale Schuz

73. SANFORDI Schmidt Fauro.

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